2:Gough E-4, 5 (1947-1949)1961 A W11 Kerala A W11
Central Kerala Nayar



European trade shook the foundations of the caste system in other ways. Ports grew larger, and within them European merchants employed Christian converts, artisans, and runaway serfs. Near the ports, serfs sometimes became slaves, being torn from their ancestral lands and sold or hired for cash.

Nevertheless, until the introduction of steam power in the second half of the nineteenth century, the technology and over-all economy of Kerala did not change very radically. Trade was still limited to surplus crops, luxury goods, and metals. Inland villages remained largely self-sufficient, with the lower castes excluded from cash transactions. Upward mobility was virtually confined to Muslims, Christians, and the Hindu aristocrats above the rank of Nayar retainers. It seems to have been this lack of basic change in the technology which allowed the persistence of a strict, hereditary rank order in villages and, within each homogeneous local caste group, of kinship as the main organizing principle.

## War and Law

The traditional period was one of perpetual wars between adjacent kingdoms, interrupted only in the rainy seasons. A royal lineage's strength lay in its monopoly of gunpowder, coinage, and customs dues, its ability to use foreign and Muslim ships for naval warfare, and its control of the royal domains both as a source of produce and of Nayar retainers as soldiers. Through its superior wealth and military power a royal lineage could force feudatory princes and vassal nobles to muster soldiers throughout the kingdom in periods of large-scale war. Each district and each village was classified according to the number of Nayar soldiers it could customarily muster for war. In the Zamorin's kingdom the strength of royal feudatories varied between 18,000 and 1,000 Nayars; of Nayar chiefs, between 5,000 and 100; of village headmen, between about 100 and 25 (Ayyar, 1938: 278). Records of the muster of each feudatory were kept by the Nayar clerks of the palace. The primary duty of each chief was to assemble regularly the soldiers of his district for military exercises at the capital, and in time of war to lead them to battle, with the king himself at their head. Within the district military training was organized on a village basis. This might be done by a Nayar village headman, by the chief himself, or, in Brahman villages, by a Nayar military leader (Asan) who acted for the chief or the king. All Nayar boys of the retainer, village headmen, and chiefly and royal

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Eleven per cent non-productive consumption contributes nearly 60 per cent of the total revenue. This is much more than its reasonable share. This amount of subsidy cannot be easily justified. Domestic consumption alone forms only a little over 7 per cent of the total consumption, contributes over 51 per cent of the total revenue from the sale of power. This is much too high a share.

7.39 There was a small, generally upward, revision of rates in December 1958, without materially altering the structure of the tariff. The above conclusions, therefore, still hold good.

7.40 Amongst the non-productive classes of load, item iv (Table 36) Public Water Works and Sewage Pumping is billed at "Industrial Rates" and classified as industrial loads for the purpose. In respect of item iii (Table 36) Public Lighting, the revised tariff of December, 1958 provides a rate of "15 nP per kWh for lamps for the first 6 hours of burning and 12 nP per unit for the remaining hours". This rectifies the high average rate per kWh in 1957-58, as seen in the above statement. The average unit rate per kWh of domestic consumption comes to as much as seven times the average selling rate of the total consumption through all categories of load. It is 15 times the average rate for productive consumption. The tariff revision of December, 1958 does not relieve this position. This is important. The structure of the domestic tariffs could induce optimum utilization of installed capacity with better load factor, but the domestic rates themselves have to be reduced substantially. In a State which leads the rest of the country in economic power generation, this should not be difficult. The "power surplus" position of the State can also enable the State to take effective steps to make cheap power (though costlier than productive power) available for domestic consumers extensively and may substantially raise the total domestic consumption to a higher level. In the light of the above observations, it is recommended that the State should review and revise its tariff policy for power sales.

## POSSIBILITY OF POWER SHORTAGE

7.41 It is learnt that power shortage is adversely affecting some of the existing big industries which are heavily dependent upon adequate power supply for their full production. Besides, starting of new industries may be hampered unless adequate power supply is forthcoming, or at least, the present power shortage is removed.

7.42 A careful analysis of the power situation in Kerala shows that there will be no danger of a prolonged serious power gap. On the generation side, according to the present plans the Panniar Power Station with an installed capacity of 30,000 kW and the Sholayar Power Station with an installed capacity of 54,000 kW are expected to be commissioned in 1963 and 1964 respectively. Two of the six generating units of 50,000 kW each in the Sabarigiri (Pamba-Kakki) Power Station are also expected to be commissioned by the end of 1964 by which time the State will reach a very comfortable position in regard to power supply.

7.43 Any suggestion for setting up thermal power stations in the State to bridge the likely gaps in power supply will have to be examined in this context. As already pointed out, thermal power generation costs more, both in terms of the cost of genera-

11: India G-4,5 (1960-1961) 1962 AWII Kerala AWII



tion and foreign exchange requirements. Besides, the construction of a thermal station even if immediately taken up, cannot be completed before two to three years. This time lag considerably reduces its value for alleviating the immediate problem of power shortage. Under such circumstances, there is no case at all for considering any thermal power stations in Kerala.

7.44 At present, the best solution would be to arrange for the staggering of power load and to encourage the working of industries during the off-peak hours. Another possibility is that the Governments of Kerala and Madras may get together to alleviate the power problem of Kerala to whatever extent it is possible through the zonal grid.

## INVESTMENT REQUIREMENTS

7.45 Kerala's installed capacity by the end of the Second Plan was 147.5 MW. To build it up to 400 MW by the end of the Third Plan as suggested in this report an additional installed capacity of roughly 250 MW will be necessary. According to current estimates, approximately Rs. 1,600 per kW will be required in Kerala for generation, transmission and distribution. On this basis, about Rs. 40 crores will be required during the Third Plan. During the Fourth Plan, installed capacity is envisaged to increase from 400 MW to 800 MW. At the same rate of investment per kW as mentioned above, investment requirements for the Fourth Plan would be about Rs. 64 crores. Thus Kerala State would require the sum of about Rs. 104 crores over the Third and Fourth Plan periods to satisfy its own power needs. Requirements of neighbouring States for Kerala's power would require additional investment over and above this figure.

## CONCLUSIONS

7.46 The abundant water resources of the State, which can be utilized for generation of hydro-electric energy, form one of the strong points of Kerala economy. Apart from the large hydro-electric potential which is estimated to be of the order of 1,589 MW, the important feature of power resources of Kerala is the low cost of generation per unit. This is due to the favourable nature of the terrain and the high degree of rainfall which Kerala receives.

7.47 In the absence of any coal or oil deposits in Kerala or in nearby regions, hydro-electric power has to be the chief source of energy requirements of industry. The favourable position of Kerala in this respect should be utilized as a factor helping industrialization. For this purpose harnessing of the hydro-electric potential should be properly planned in advance so that an adequate amount of well-assured electric supply could be guaranteed to the industrialists. In this context the State would be well-advised to plan for a power surplus.

7.48 In view of the fact that Kerala is in a position to generate electric energy in excess of its requirements, while the neighbouring State of Madras has almost exhausted its domestic resources and Mysore and Andhra are just on the verge of self-